

Figure 1 (A-F)

Construct Forms Comprising at Least one Single-Stranded Region

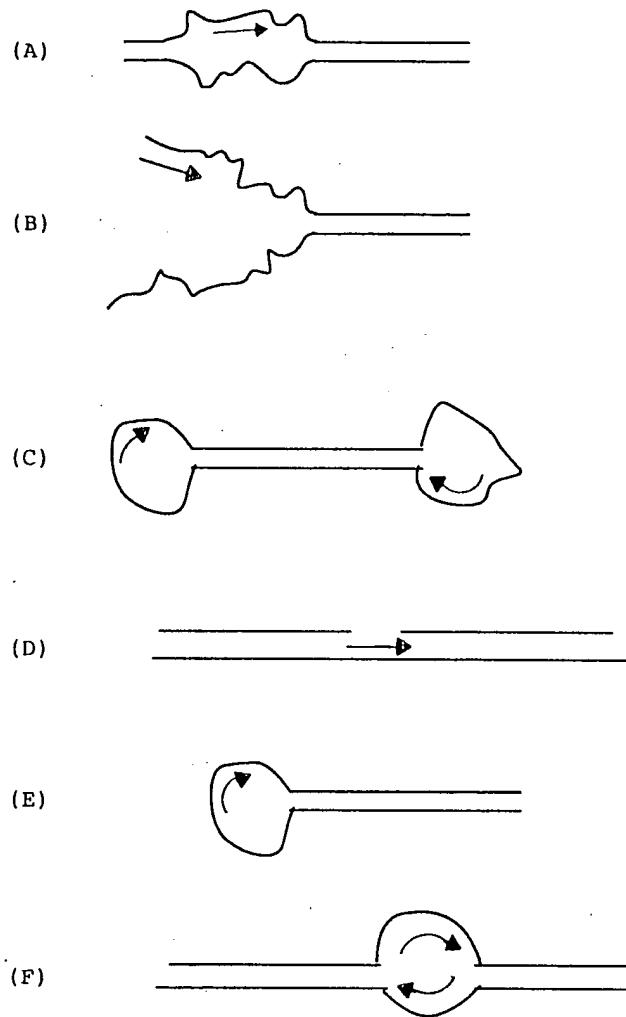


Figure 2 (A-F)

Functional Forms of the Construct

3/23

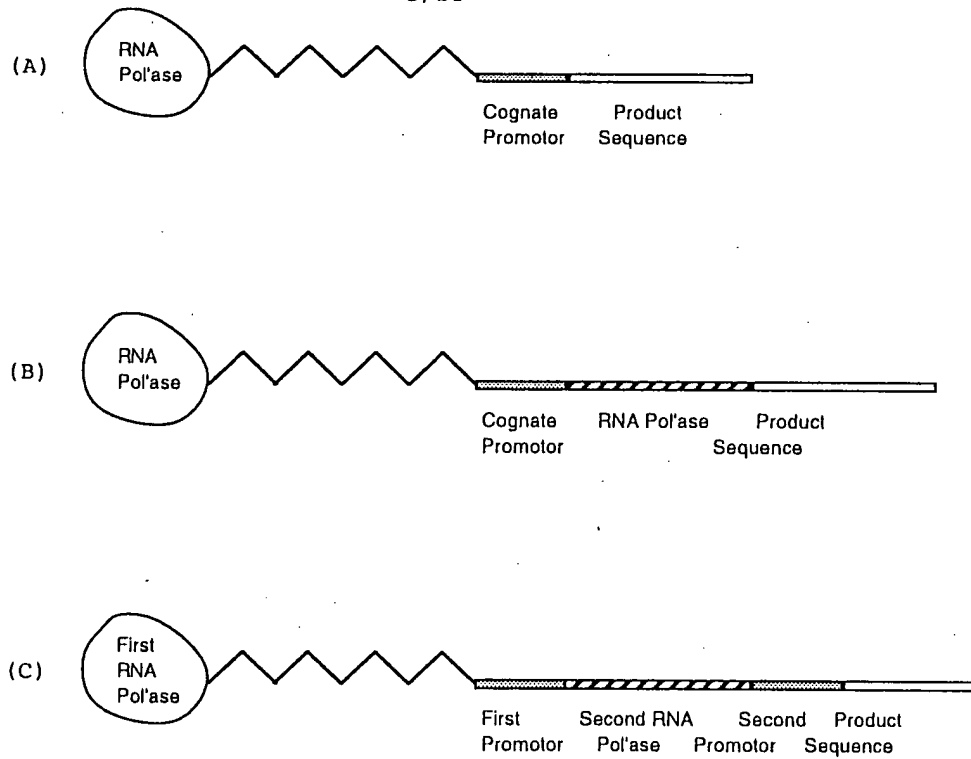
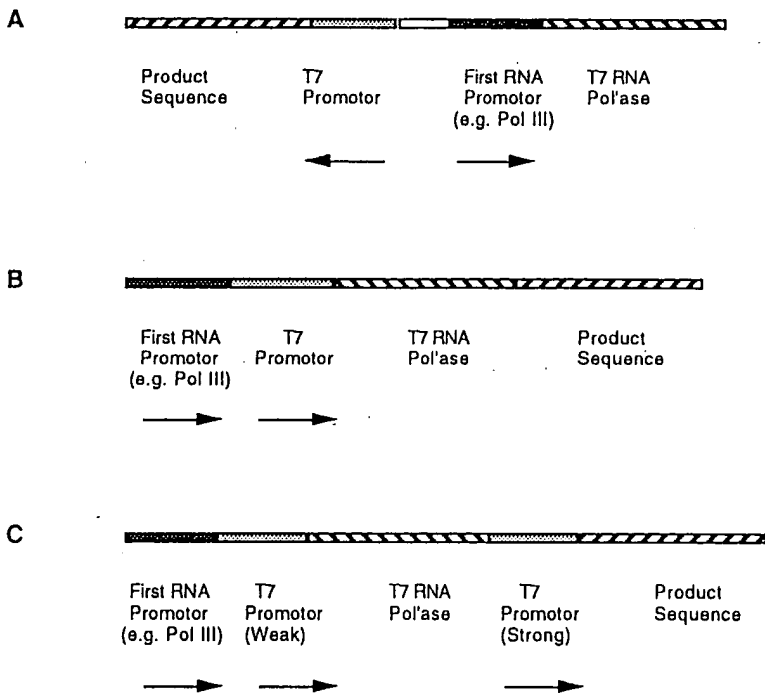


Figure 3 (A-C)

Three Constructs with an RNA Polymerase  
Covalently Attached to a Transcribing Cassette



**Figure 4 (A-C)**

### Three Constructs with Promoters for Endogenous RNA Polymerase

M13mp18. Seq Length: 7250

1.	AATGCTACTA	CTATTAGTAG	AATTGATGCC	ACCTTTTCAG	CTOGGCGGCC
51.	AAATGAAAAT	ATAGCTAAAC	AGGTTATTGA	OCATTTGCGA	AATGTATCTA
101.	ATGGTCAAAC	TAAATCTACT	CGTTGCGAGA	ATTGGGAATC	AACTGTTACA
151.	TGGAATGAAA	CTTCAGACA	CCGTACTTTA	GTTGCATATT	TAAAACATGT
201	TGAGCTACAG	CAOCAGATTC	AGCAATTAAG	CTCTAAGCCA	TOOGCAAAAA
251	TGACCTCTTA	TCAAAAGGAG	CAATTAAAGG	TACTCTCTAA	TOCTGACCTG
301.	TTGGAGTTTG	CTTCGGTCT	GGTTGCTTT	GAAGCTOGAA	TTAAAACGCG
351.	ATATTGAAG	TCTTGGGCG	TTCCTCTTAA	TCTTTTGAT	GCAATCGCT
401.	TTGCTTCTGA	CTATAATAGT	CAGGGTAAAG	ACCTGATTTT	TGATTTATGG
451.	TCATTCTCGT	TTTCTGAACT	GTTTAAAGCA	TTTGAGGGGG	ATTCAATGAA
501.	TATTTATGAC	GATTCGCGAG	TATTGGAAGC	TATCCAGTCT	AAACATTTTA
551.	CTATTACCCC	CTCTGGCAAA	ACTTCTTTTG	CAAAAGCCTC	TOGCTATTTT
601.	GGTTTTTATC	GTCGTCTCGT	AAAAGAGGGT	TATGATAGTG	TTGCTCTTAC
651.	TATGCTCGT	AATTCCTTTT	GGGTTATGT	ATCTGCATTA	GTTGAATGTG
701.	GTATTOCTAA	ATCTCAACTG	ATGAATCTTT	CTAOCGTAA	TAATGTTGTT
751.	CGTTAGTTC	GTTTTATTAA	CGTAGATTTT	TCTTCCCAAC	GTOCTGACTG
801.	GTATAATGAG	CCAGTCTTA	AAATGCGATA	AGGTAATTCA	CAATGATTAA
851.	AGTTGAAATT	AAACCATCTC	AAGCCCAATT	TACTACTCGT	TCTGGTGTTC
901.	TOGTCAGGGC	AAGCTTATT	CACTGAATGA	GCAGCTTTGT	TACGTTGATT
951.	TGGGTAATGA	ATATCGGTT	CTTGTCGAAG	ATTACTCTTG	ATGAAGGTCA
1001	GOCAGCCTAT	GCGCTCGTC	TGTACACCGT	TCATCTGTCC	TCTTTCAAAG
1051	TTGGTCAGTT	CGGTTCCCTT	ATGATTGAAC	GTCTGCGCCT	CGTTCCGCT
1101	AAGTAACATG	GAGCAGGTGG	CGGATTTOGA	CACAAATTAT	CAGGCGATGA
1151	TACAAATCTC	CGTTGTACCTT	TGTTTGGCGC	TTGGTATAAT	CGCTGGGGGT
1201	CAAAGATGAG	TGTTTTAGTG	TATTCCTTCG	OCTCTTTCGT	TTAGGTTGG

Figure 5

M13mp18 Nucleic Acid Sequence

1251	TGCTTGTGTA	GTGGCATTAC	GTATTTTACC	CGTTTAATGG	AACTTCTCTC
1301	ATGAAAAAGT	CTTTAGTCT	CAAAGCTCT	GTAGGCGTTG	CTAAGCTCTG
1351	TCGATGCTG	TCTTGTGCTG	CTGAGGCTGA	CGATGCGCA	AAAGCGGCT
1401	TTAACTGCT	GCAAGCTCA	GCGAAGCAAT	ATATGCGTTA	TGCTGCGGCG
1451	ATGTTTGTG	TCATTGTGCG	CGCAACTATC	GGTATCAAGC	TGTTTAAGAA
1501	ATTCACTCTG	AAAGCAAGCT	GATAAAGCGA	TACAATTAAA	GGCTCTTTT
1551	GGAGCTTTT	TTTTTGAGA	TTTCAACGT	GAAAAATTA	TTATTGCAA
1601	TTCTTTAGT	TGTTCTTTC	TATTCTCACT	CGCTGAAAC	TGTTGAAAGT
1651	TGTTTAGCAA	AAGCCATAC	AGAAAATTCA	TTACTAACG	TCTGGAAGA
1701	CGACAAACT	TTAGATGTT	ACGCTAACTA	TGAGGCTTGT	CTGTGGAATG
1751	CTACAGGCT	TGTAGTTTGT	ACTGGTGACG	AACTCAGTG	TTACGGTACA
1801	TGGGTTCTA	TTGGGCTTGC	TATGCTGAA	AATGAGGCTG	GTGGCTCTGA
1851	GGGTGCGGT	TCTGAGGCTG	GCGGTTCTGA	GGGTGCGGT	ACTAAAGCTC
1901	CTGAGTAGG	TGATACAGCT	ATTGCGGCT	ATACTTATAT	CAAGCTCTC
1951	GACGGCATT	ATGCGCTGG	TACTGAGCAA	AAGCGCTA	ATCTAATCC
2001	TTCTCTGAG	GAGTCTCAGC	CTCTTAATAC	TTTCATGTTT	CAGAATAATA
2051	GGTTGAGAA	TAGGAGGCG	GCATTAAGTG	TTTATAAGGC	CACTGTTACT
2101	CAAGGCACTG	AAGCGTTAA	AACTTATTAC	CAGTACACTC	CTGTATCATC
2151	AAAAGCATG	TATGACGCTT	ACTGGAAGCG	TAAATTCAGA	GACTGCGCTT
2201	CAAGGCACTG	AAGCGTTAA	AACTTATTAC	CAGTACACTC	CTGTATCATC
2151	AAAAGCATG	TGCTCAAGC	TCCTGTCAAT	GCTGCGGCG	GCTCTGGTGG
2201	TCATTCTGG	CTTTAATCAA	GATCATTGG	TTTGTGAATA	TCAAGGCCAA
2251	TGCTCTGAGC	TGCTCAAGC	TCCTGTCAAT	GCTGCGGCG	GCTCTGGTGG
2301	TGGTTCTGGT	GCGGCTCTG	AGGGTGGTGG	CTCTGAGGCT	GCGGCTCTG
2351	AGGGTGGCG	CTCTGAGGGA	GCGGTTGCG	GTGGTGGCTC	TGGTTGCGGT
2401	GATTTTGATT	ATGAAAAGAT	GCGAAAAGCT	AATAAGGGG	CTATGAAGCA
2451	AAATGCGAT	GAAAAGCGC	TACAGTCTGA	CGCTAAGGC	AACTTGATT

Figure 5

M13mp18 Nucleic Acid Sequence

2501	CTGTGCTAC	TGATTAOGGT	GCTGCTATOG	ATGGTTTCAT	TGGTGAOGTT
2551	TOCGGOCCTG	CTAATGGTAA	TGGTGCTACT	GGTGATTTTG	CTGGCTCTAA
2601	TTOCCAAATG	GCTCAAGTOG	GTGACGGTGA	TAATTCACCT	TTAATGAATA
2651	ATTTCOGTCA	ATATTTACCT	TOOCTOOCCTC	AATOGGTTGA	ATGTGOGOOT
2701	TTTGTCTTTA	GOGCTGGTAA	ACCATATGAA	TTTTCTATTG	ATTGTGACAA
2751	AATAAACTTA	TTOCGTGGTG	TCTTTGCGTT	TCTTTTATAT	GTTGOCACCT
2801	TTATGTATGT	ATTTTCTACG	TTTGCTAACA	TACTGOGTAA	TAAGGAGTCT
2851	TTATCATGOC	AGTTCCTTTG	GGTATTOOGT	TATTATTGCG	TTTOCTCGGT
2901	TTOCTTCTGG	TAACCTTGTT	CGGCTATCTG	CTTACTTTTC	TTAAAAAGGG
2951	CTTOGGTAAG	ATAGCTATTG	CTATTTTCATT	GTTTCTTGCT	CTTATTATTG
3001	GGCTTAACTC	AATTCTTGTTG	GGTATCTCT	CTGATATTAG	CGCTCAATTA
3051	OOCCTGACT	TTGTTCAAGG	TGTTCACTTA	ATTCTCOOGT	CTAATGCGCT
3101	TOOCTGTTTT	TATGTTATTC	TCTCTGTAAA	GGCTGCTATT	TTCATTTTTG
3151	ACGTAAACA	AAAAATCGTT	TCTTATTTGG	ATTGGGATAA	ATAATATGGC
3201	TGTTTTATTT	GTAAGTGGCA	AATTAGGCTC	TGGAAAGACG	CTOGTTAGOG
3251	TTGGTAAGAT	TCAGGATAAA	ATTGTAGCTG	GGTGCAAAAT	AGCAACTAAT
3301	CTTGATTTAA	GGCTTCAAAA	OCTCOOGCAA	GTCGGGAGGT	TOGCTAAAAC
3351	GOCCTOGGTT	CTTAGAATAC	CGGATAAGOC	TTCTATATCT	GATTTGCTTG
3401	CTATTGGGOG	CGGTAATGAT	TOCTACGAATG	AAAATAAAAA	CGGCTTGCTT
3451	GTTCTOGATG	AGTGOGGTAC	TTGGTTTAAT	AOCOGTTCCT	GGAATGATAA
3501	GGAAAGACAG	CCGATTATTG	ATTGGTTTCT	ACTGCTOGT	AAATTAGGAT
3551	GGGATATTAT	TTTTCTTGTT	CAGGACTTAT	CTATTGTTGA	TAAACAGGOG
3601	CGTTCTGCAT	TAGCTGAACA	TGTTGTTTAT	TGTOGTGCTC	TGGACAGAAT
3651	TACTTTACCT	TTTGTOGGTA	CTTTATATTC	TCTTATTACT	GGCTOGAAAA
3701	TGOCCTGOC	TAAATTACAT	GTTGGOGTTG	TTAAATATGG	CGATTCTCAA
3751	TTAAGCOCTA	CTGTTGAGOG	TTGGCTTTAT	ACTGGTAAGA	ATTTGTATAA
3801	CGCATATGAT	ACTAAACAGG	CTTTTCTAG	TAATTATGAT	TOCGGTGTTT

Figure 5

M13mp18 Nucleic Acid Sequence

3851	ATTCTTATTT	AACGCTTAT	TTATCACACG	GTCGGTATTT	CAAACCATTA
3901	AATTTAGGTC	AGAAGATGAA	ATTAACATAA	ATAATATTGA	AAAAGTTTTT
3951	TCGCGTTCTT	TGTCTTGCGA	TTGGATTGTC	ATCAGCATT	ACATATAGTT
4001	ATATAACCCA	ACCTAAGGCG	GAGGTTAAAA	AGGTAGTCTC	TCAGACCTAT
4051	GATTTTGATA	AATCACTAT	TGACTCTTCT	CAGCGTCTTA	ATCTAAGCTA
4101	TCGCTATGTT	TTCAAGGATT	CTAAGGGAAA	ATTAATTAAT	AGCGACGATT
4151	TACAGAAGCA	AGGTTATTCA	CTCACATATA	TTGATTTATG	TACTGTTTCC
4201	ATTAATAAAG	GTAATTCAAA	TGAAATTGTT	AAATGTAATT	AATTTTGTTT
4251	TCTTGATGTT	TGTTTCATCA	TCTTCTTTTG	CTCAGGTAAT	TGAAATGAAT
4301	AATTOGCTC	TGCGCGATT	TGTAACCTGG	TATTCAAAGC	AATCAGGCGA
4351	AATCCGTTATT	GTTTCTCCCG	ATGTAAAAGG	TACTGTTACT	GTATATTCAT
4401	CTGAOGTTAA	ACCTGAAAAT	CTACGCAATT	TCTTTATTTC	TGTTTTACGT
4451	GCTAATAATT	TTGATAATGGT	TGGTTCAATT	CCCTOCATAA	TTCAGAAGTA
4501	TAATCCAAAC	AATCAGGATT	ATATTGATGA	ATTGOCATCA	TCTGATAATC
4551	AGGAATATGA	TGATAATTC	GCTCCTCTCG	GTGGTTTCTT	TGTTCCGCAA
4601	AATGATAATG	TTACTCAAAC	TTTTAAAATT	AATAACGTT	GGGCAAGGA
4651	TTTAATACGA	GTTGTGGAAT	TGTTTGTAAG	GTCTAATACT	TCTAAATCCT
4701	CAAATGTATT	ATCTATTGAC	GGCTCTAATC	TATTAGTTGT	TAGTGCTCCT
4751	AAAGATATTT	TAGATAAACC	TCCTCAATTC	CTTCTACTG	TTGATTTGOC
4801	AATGAACAG	ATATTGATTG	AGGGTTTGAT	ATTTGAGGTT	CAGCAAGGTG
4851	ATGCTTTAGA	TTTTTCATTT	GCTGCTGGCT	CTCAGCGTGG	CACTGTTGCA
4901	GGCGGTGTTA	ATACTGAACG	CTCAOCTCT	GTTTTATCTT	CTGCTGGTGG
4951	TTGTTCCGGT	ATTTTAAATG	GCGATGTTTT	AGGGCTATCA	GTTCCGCGAT
5001	TAAAGACTAA	TAGCATTCA	AAAATATTGT	CTGTGCAACG	TATTCTTACG
5051	CTTTCAGGTC	AGAAGGGTTC	TATCTCTGTT	GGCCAGAATG	TCCCTTTTAT
5101	TAAAGACTAA	TAGCATTCA	AAAATATTGT	CTGTGCAACG	TATTCTTACG
5151	CGATTGAGCG	TCAAAATGTA	GGTATTTOCA	TGAGCGTTTT	TCCTGTTGCA

Figure 5

M13mp18 Nucleic Acid Sequence



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5201 ATGGCTGGGG . GTAATATTGT TCTGGATATT AOCAGCAAGG CCGATAGTTT
5251 GAGTTCTCT ACTCAGGCAA GTGATGTTAT TACTAATCAA AGAAGTATTG
5301 CTACAAOOGT TAATTTGGT GATGGACAGA CTCTTTTACT CCGTGGGCTC
5351 ACTGATTATA AAAACACTTC TCAAGATTCT GGGGTACOGT TOCTGTCTAA
5401 AATOCCTTTA ATDGGGCTCC TGTTTAGCTC CCGCTCTGAT TOCAAOGAGG
5451 AAAGCAOGTT ATACGTGCTC GTCAAAGCAA OCATAGTAOG CGOCTGTAG
5501 CGGCGCATT AAGCGGGGG GTGTGGTGGT TAOGGCGAGC GTGACOGCTA
5551 CACTTGOCAG CGOCTAGOG COOGCTOCTT TCGCTTTCTT COCTTCTTT
5601 CTGOCAGGT TOGCGGCTT TOOOOGTCAA GCTCTAAATC GGGGGCTOOC
5651 TTTAGGGTTC OGATTTAGTG CTTTACGGCA OCTDGAOOOC AAAAACTTG
5701 ATTTGGGTGA TGGTTCAOGT AGTGGGOCAT CGOCTGATA GACGGTTTTT
5751 CGOCTTTGA CGTTGGAGTC CACGTTCTTT AATAGTGGAC TCTTGTTCA
5801 AACTGGAACA AACTCAAOC CTATCTOGG CTATTCTTTT GATTTATAAG
5851 GGATTTGOC GATTTOGGAA CCAOCATCAA ACAGGATTTT CGOCTGCTGG
5901 GGCAAACCAG CGTGGACOGC TTGCTGCAAC TCTCTAGGG CCAGGCGGTG
5951 AAGGGCAATC AGCTGTTGOC CGTCTOGCTG GTGAAAAGAA AAAOCAOCT
6001 GGGGOCAT AOCGAAOOG OCTCTOOOG CGOGTTGOC GATTCATTAA
6051 TGCAGCTGGC AOGACAGGTT TOOGACTGG AAAGGGGGCA GTGAGOGCAA
6101 CGCAATTAAT GTGAGTTAGC TCACTCATTA GGCADOOAG GCTTTACACT
6151 TTATGCTTCC GGCTGATG TTGTGTGAA TTGTGAGGG ATAACAATTT
6201 CACACAGGAA ACAGCTATGA OCATGATTAC GAATTOGAGC TOGGTACOGG
6251 GOGATCTCT AGAGTOGACC TGCAGGCATG CAAGCTTGGC ACTGGGOGTC
6301 GTTTTACAAC GTGTGACTG GGAAAAOCT GGGGTTAOC AACTTAATOG
6351 OCTTGACGA CAATCOOCTT TOGOCAGCTG GGTAAATAGC GAAGAGGOC
6401 GCAOGATOG COCTTOOC AAGTTGOGCA GCTGAATGG CGAATGGGC
6451 TTTGCTGGT TTOGGCAOC AGAAGGGTG CGGAAAGCT GGCTGGAGTG
6501 CGATCTTCT GAGGOGATA CGGTGTOGT COOCTCAAAC TGGCAGATGC

```

Figure 5

M13mp18 Nucleic Acid Sequence

10/23

6551	AOGGTTAOGA	TGOGGOCATC	TACACCAAOG	TAAOCTATOC	CATTACGGTC
6601	AATCOGCOGT	TTGTTCCAC	GGAGAATCOG	ACGGGTTGTT	ACTOGCTCAC
6651	ATTTAATGTT	GATGAAAGCT	GGCTACAGGA	AGGOCAGAOG	CGAATTATTT
6701	TTGATGGOGT	TCCTATTGGT	TAAAAAATGA	GCTGATTAA	CAAAAATTTA
6751	AOGCGAATTT	TAACAAAATA	TTAACGTTTA	CAATTTAAAT	ATTTGCTTAT
6801	ACAATCTTOC	TGTTTTTGGG	GCTTTTCTGA	TTATCAAOOG	GGGTACATAT
6851	GATTGACATG	CTAGTTTTAC	GATTACOGTT	CATCGATTCT	CTTGTTTGCT
6901	OCAGACTCTC	AGGCAATGAC	CTGATAGCOCT	TTGTAGATCT	CTCAAAAATA
6951	GCTACCOCTCT	COGCGATGAA	TTTATCAGCT	AGAACGGTTG	AATATCATAT
7001	TGATGGTGAT	TTGACTGTCT	COGGCCTTTC	TCACCOCTTTT	GAATCTTTAC
7051	CTACACATTA	CTCAGGCATT	GCATTTAAAA	TATATGAGGG	TTCTAAAAAT
7101	TTTTATCCTT	GCGTTGAAAT	AAAGGCTTCT	COOGCAAAAG	TATTACAGGG
7151	TCATAATGTT	TTTGGTACAA	COGATTTAGC	TTTATGCTCT	GAGGCTTTAT

Figure 5

M13mp18 Nucleic Acid Sequence

COMPLEMENTARY TO M<sub>13</sub>

POSITION	5' . . . 3'	POSITION	
645	AGCAACACTATCATA	631	M <sub>13</sub> /1
615	ACGAOGATAAAAAOC	601	M <sub>13</sub> /2
585	TTTTCGAAAAGAAGT	571	M <sub>13</sub> /3
555	AATAGTAAAATGTTT	541	M <sub>13</sub> /4
525	CAATACTGOGGAATG	511	M <sub>13</sub> /5
495	TGAATCCCCCTCAAA	481	M <sub>13</sub> /6
465	AGAAAACGAGAATGA	451	M <sub>13</sub> /7
435	CAGGTCTTTACCOCTG	421	M <sub>13</sub> /8
405	AGGAAAGCGGATTGC	391	M <sub>13</sub> /9
375	AGGAAGCCCGAAAGA	361	M <sub>13</sub> /10

## COMPLEMENTARY TO SS PHAGE DNA

POSITION	5' . . . 3'	POSITION	
351	ATATTTGAAGTCTTT	366	M <sub>13</sub> /11
371	TCTTTTGTGCAAT	386	M <sub>13</sub> /12
391	CTATAACTCAGGG	406	M <sub>13</sub> /13
411	TGATTTATGGTCATT	426	M <sub>13</sub> /14
431	GTTTAAAGCATTTGA	446	M <sub>13</sub> /15
451	TATTTATGACGATTC	466	M <sub>13</sub> /16
471	TATCCAGTCTAAACA	486	M <sub>13</sub> /17
491	CTCTGGCAAACTTC	506	M <sub>13</sub> /18
511	TCGCTATTTTGGTTT	526	M <sub>13</sub> /19
531	AAACGAGGGTTATGA	546	M <sub>13</sub> /20

Figure 6

Primers for Nucleic Acid Production  
Derived from M13mp18 Sequence

12/23

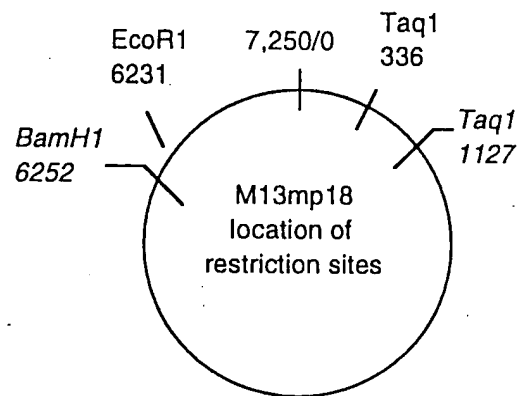
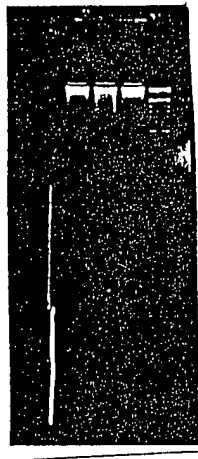


Figure 7

Appropriate M13mp18 Restriction Sites

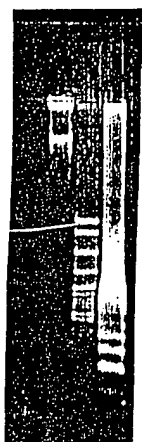
13/23



Lane 1: from calf thymus + Taq digested mp18 amplification reaction  
Lane 2: from Taq digested mp18 amplification reaction  
Lane 3: from calf thymus amplification reaction  
Lane 4: øX174 Hinf1 size marker

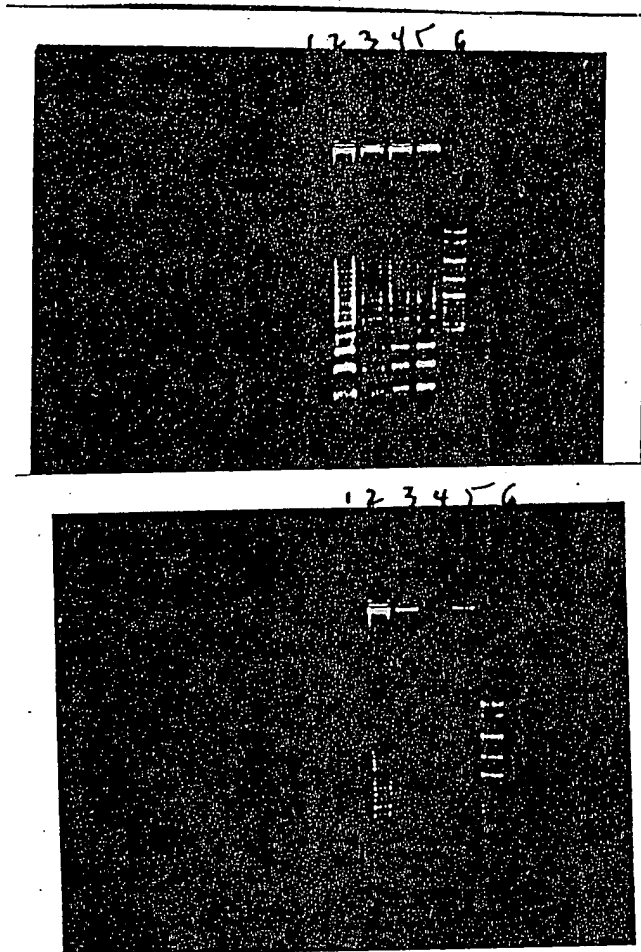
Figure 8

14/23



Lane 1: no template  
Lane 2: mp18 template, phosphate buffer  
Lane 3: MspI/pBR322 size marker  
Lane 4: mp18 template, MOPS buffer

Figure 9

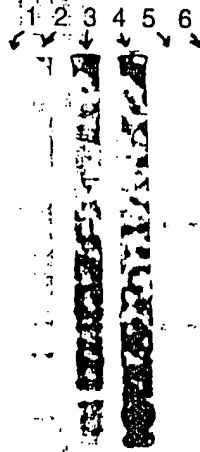


Top= (+) Template  
Bottom= (-) Template

Lane 1: phosphate buffer  
Lane 2: MES  
Lane 3: MOPS  
Lane 4: DMAB  
Lane 5: DMG  
Lane 6: pBR322/Mspl size marker

Figure 10

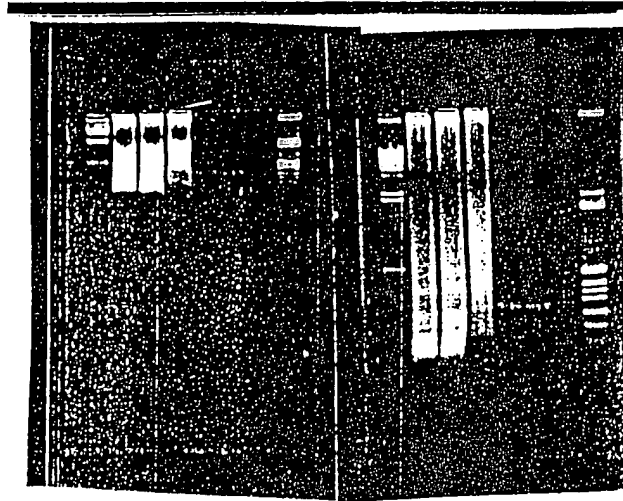
16/23



Lane 1: DMAB buffer, no template  
Lane 2: DMAB buffer, mp18 template  
Lane 3: DMG buffer, no template  
Lane 4: DMG buffer, mp18 template  
Lane 5: No reaction  
Lane 6: 200 ng Taq I digested mp18  
size marker/positive control

Figure 11





First Time Interval      Second Time Interval

#### Agarose Gel Analysis

- Lane 1: lambda Hind III marker
- Lane 2: Amp/Untreated
- Lane 3: Amp/Kinased
- Lane 4: Amp/Kinased/Ligated
- Lane 5: PCR/Untreated
- Lane 6: PCR/Kinased
- Lane 7: PCR/Kinased/Ligated
- Lane 8:  $\phi$ X174/Hinf1 marker

Figure 12

18/23

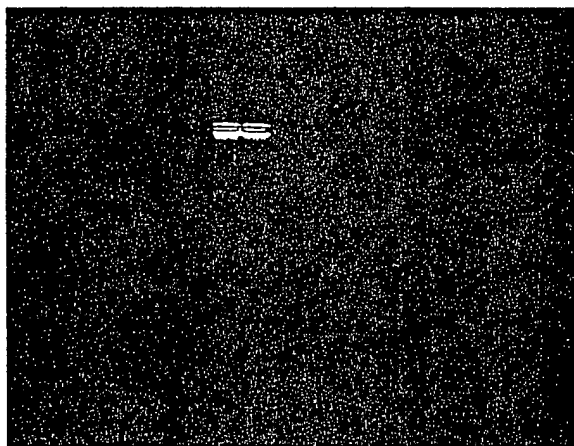
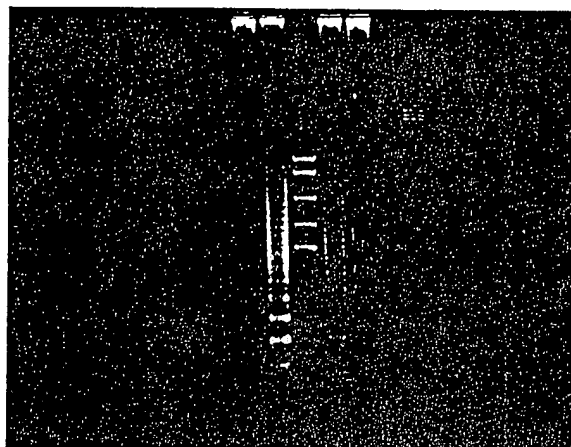


Figure 13



19/23

1 2 3 4 5 6



Lane 1: Primers alone

Lane 2: Primers + taq digested M13 DNA

Lane 3: Molecular weight markers

Lane 4: Primers + RNA

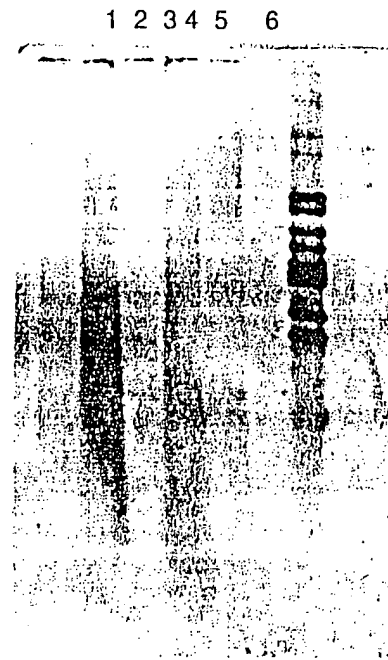
Lane 5: Primers alone

Lane 6: M13 digested DNA

Buffer was dimethyl amino glycine, pH 8.6

Figure 14

20/23



Lane 1: Primers alone  
Lane 2: Primers + taq digested M13 DNA  
Lane 3: Molecular weight markers  
Lane 4: Primers + RNA  
Lane 5: Primers alone  
Lane 6: M13 digested DNA  
Buffer was dimethyl amino glycine, pH 8.6

Figure 15

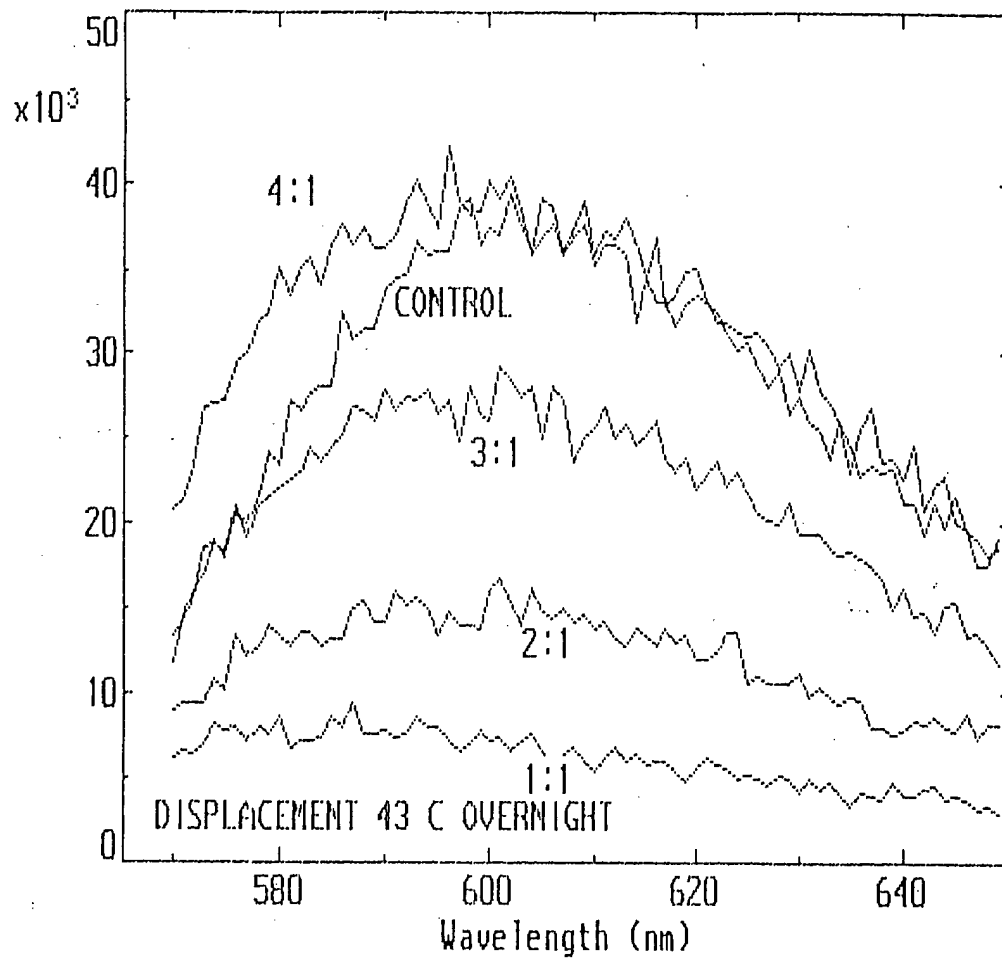


Figure 16

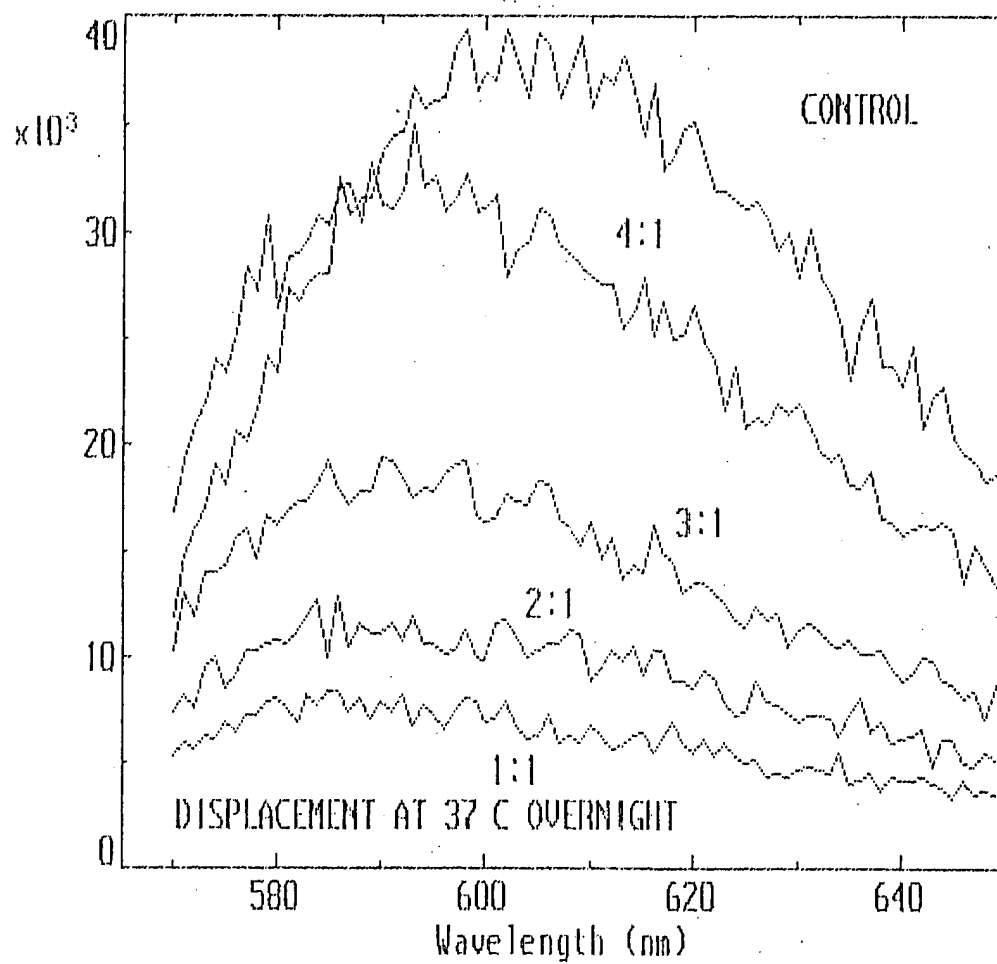


Figure 17

23/23

pIBI 31-BH5-2

fmet AUG of Lac z (T7 Promotor region....  
LAC PROMOTOR..ATG ACC ATG ATT ACG CCA GAT ATC AAA TTA ATA CGA CTC ACT ATA  
oligo 50-mer 3'- tac t\*aa t'gc ggt\* ct\*a t\*ag t\*Vt aat\* tat\* gct\* gag t\*ga t\*at\* c-5'  
10 base insert  
T7 RNA Start (« T3 Promotor Region )  
IGGG CTC ICCT TTA GTG ACG GTT AAT  
...»} «- T3 Start Signal

pIBI 31 BSII/HCV

fmet AUG of Lac z (T3 Promotor region --) T3 RNA Start  
LAC PROMOTOR ..ATG ACC ATG ATT ACG CCA AGC TCG AAA TTA ACC CTC ACT AAA /GGG  
oligo 50-mer 3'- tac t\*aa t\*ac t\*aa t'gc ggt\* t\*V--10 base insert--.....  
MULTIPLE CLONING SITE + 390 BASE INSERT CTA /TAG TGA GTC CGT ATT AAT....  
«- T7 Start Signal  
5'-ct\*a t\*ag t\*ga gt\*c gt\*a tt\*a at\*.....

Figure 18